as important and necessary strategies to reduce harm from blood-borne viruses. UN conventions have long recommended that prisoners should have access to the same standards of health care that are available in the community. As an effective intervention that reduces needle and syringe sharing and blood-borne virus transmission among people who inject drugs, availability of such programmes in prison constitutes not only an important public health function,[5] but a basic human right.

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*Shelley Walker, Mark Stoové, Mandy Wilson, Peter Higgs
shelley.walker@postgrad.curtin.edu.au

National Drug Research Institute, Faculty of Health Sciences, Curtin University, Fitzroy, VIC 3065, Australia (SW); Burnet Institute, Behaviours and Health Risks Program, Melbourne, VIC, Australia (SW, MS, PH); School of Public Health and Preventive Medicine, Monash University, VIC, Australia (MS); National Drug Research Institute, Faculty of Health Sciences, Curtin University, Perth, WA, Australia (MW); and Department of Public Health, La Trobe University, Bundoora, VIC, Australia (PH)

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Gender-neutral HPV vaccination in the UK, rising male oropharyngeal cancer rates, and lack of HPV awareness

We welcomed the announcement in July, 2018, of the expansion of the UK national human papillomavirus (HPV) vaccination programme to include boys aged 12–13 years.[1] This expansion will be implemented from 2019, and will accelerate the effects of vaccination in reducing the incidence of HPV-associated cancers, particularly those that occur predominantly in men, such as oropharyngeal cancer. The incidence of oropharyngeal squamous cell cancer in men overtook the incidence of cervical cancer in the UK for the first time in 2016,[2] as it did in the USA in 2012 (appendix). The incidence of oropharyngeal squamous cell cancer and the proportion of such cases that are caused by HPV are set to rise further over the next 20–30 years, before the benefits of the vaccine programme start to be seen. Earlier diagnosis is associated with improved survival,[3] but no screening method that would achieve this exists at present. Nonetheless, while such a method is awaited, increasing awareness of HPV and oropharyngeal squamous cell cancer might be beneficial.

We gathered preliminary evidence regarding the public awareness of HPV-associated disease in men and women in the UK with an online, UK-wide, population-based survey. Of 1200 respondents (649 [54·1%] female; appendix), 444 (37·0%; 95% CI 34·3–39·7) had ever heard of HPV. Of these, 309 (69·6%; 65·2–73·7) knew that HPV could be transmitted during sex, 172 (38·7%; 34·3–43·3) recognised HPV as a risk factor for oropharyngeal squamous cell cancer, and 283 (63·7%; 59·2–68·1) knew that a preventive vaccine existed. Women were almost twice as likely to be aware of HPV as were men (290 [44·7%] *vs* 154 [27·9%]; p<0·001).

To maximise the potential benefits of HPV vaccination, it will be important to maintain the high vaccine uptake among school pupils aged 12–13 years, which requires the consent of an adult. Raising awareness of HPV, and the fact that HPV is not just associated with cervical cancer but also with cancers at other sites, might help to ensure consent for the vaccine. In parallel, efforts should be made to raise awareness among health-care professionals.[4]

In summary, to support the introduction of a gender-neutral HPV vaccination strategy, interventions to increase awareness of HPV and its association with non-cervical cancer should be considered. In addition, the development of early detection strategies to reduce the proportion of HPV-associated cancers that present late, including oropharyngeal squamous cell cancer and anal cancers, should be prioritised.

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*Matt Lechner, Oliver S Jones, Charles E Breeze, Richard Gilson
m.lechner@ucl.ac.uk

UCL Cancer Institute, University College London, London WC1E 6AG, UK (ML, OSJ, CEB); Head and Neck Centre, University College London Hospitals NHS Trust and Barts Health NHS Trust, London, UK

For **US cancer incidence data** see https://seer.cancer.gov/data/

See **Online** for appendix

(ML); European Molecular Biology Laboratory, European Bioinformatics Institute (EMBL-EBI), Wellcome Genome Campus, Cambridge, UK (CEB); and Institute for Global Health, University College London, London, UK (RG)

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Low anti-rubella antibody levels in public facilities staff in Tokyo

As of Oct 22, 2018, the US Centers for Disease Control and Prevention warned pregnant women to refrain from travelling to Japan, especially to the Kantō region, if not fully protected from rubella, raising its alert level to 2 ("practice enhanced precautions").[1] According to the National Institute of Infectious Diseases (Tokyo, Japan), 2586 cases of rubella were diagnosed between Jan 1 and Dec 12, 2018.[2] The greater Tokyo metropolitan area in Japan is facing a huge outbreak of rubella this year, for which the Ministry of Health, Labour, and Welfare issued an alert[3] on Aug 14, 2018.

Congenital rubella syndrome can be prevented by keeping the anti-rubella antibody at a high concentration by vaccination. Among various methods of screening for immunity against rubella, the haemagglutination inhibition assay is a commonly chosen method by the municipal government to investigate the seroprotective status of the population in Japan. An antibody titre of 1/16 or less measured by this assay is considered by Japanese authorities to be an inadequate level of protection. At the Eijudo Clinic in east-central Tokyo, we conducted rubella screening during the previous rubella outbreak[4] in Japan in 2013. Seven (41%) of 17 staff members at the clinic had antibody titres of 1/16 or less based on the haemagglutination-inhibition assay. In the same year, 14 344 cases of confirmed rubella and 32 cases of congenital rubella syndrome were reported in Japan.[5] Since then, the local medical association has been successful in promoting rubella titre screening for faculty members at all public schools within the ward, but, so far, has been unable to convince the population naive to rubella exposure to be vaccinated. In 2018, before the outbreak became apparent, we carried out the same screening on 39 faculty members of an elementary school close to Eijudo Clinic in Tokyo, and found that 15 participants (39%) had antibody titres of 1/16 or less.

Despite the 5 years that have passed since the last outbreak, the alerts issued, and the strong continuous recommendations from the government to complete rubella vaccination, the proportion of seroprotected individuals in the population remains low, allowing unvaccinated and under-vaccinated individuals to be infected. The settings for the aforementioned screenings, a clinic and an elementary school, are similar in that they are both potential public sources of rubella exposure for pregnant women. We speculate that the low antibody titres seen among these probe populations in the Tokyo area might reflect the situation throughout Japan, based on common and average Japanese attitudes towards vaccines, outbreak response, and public health interest. We are concerned about this risk for pregnant women in or travelling to the greater Tokyo metropolitan area, and to the surrounding Kantō region. As well as alerting people in these populations, we strongly suggest screening and (where necessary) vaccination of staff members in settings where pregnant women are likely to visit.

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Teiichi Matsunaga,
**Toshio Leo King Kon*
leoking168@thekingclinic.com

Eijudo Clinic, Tokyo, Japan (TM); The King Clinic, Tokyo 150-0001, Japan (TLKK); Tokyo Women's Medical University School of Medicine, Tokyo, Japan (TLKK); and Department of Tropical Medicine, Jikei University School of Medicine, Tokyo, Japan (TLKK)

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Dengue pre-vaccination screening and positive predictive values

Although Sanofi Pasteur's dengue vaccine CYD-TV (Dengvaxia) is already licensed in 20 countries, WHO only recommends its use in individuals from endemic settings with serological confirmation of past dengue virus infection. This pre-vaccination screening recommendation followed an announcement[1] in November, 2017, and a paper[2] published in 2018 that showed that, in the long-term follow-up of phase 3 clinical trials, vaccine recipients who had not been infected by dengue before vaccination (ie, seronegative individuals) had